Gregory, Bernarr

From: PLUS
Sent: Thursday, February 10, 2005 2:08 PM
To: Gregory, Bernarr
Subject: PLUS Results for 10761014

Here are the PLUS search results for 10761014.

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10761014_QUAL.txt


10761014_LIST.txt


10761014_WEST.txt


10761014_EAST.txt


10761014.east


10761014_CLS.txt


10761014_CLSTITLES.txt


10761014_WDS.txt

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PLUS Search Results for S/N 10761014, Searched February 10, 2005

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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Most Frequently Occurring Classifications of Patents Returned
From A Search of 10761014 on February 10, 2005

Original Classifications

15	331/1A
15	455/76
14	331/16
11	708/276
10	331/2
7	331/18
7	331/4
7	375/308
6	327/105
6	708/271
5	327/106
5	375/376
4	327/107
4	331/1R
4	331/25
4	332/103
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3	332/100
3	332/117
3	342/22
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3	375/326
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3	375/373
3	455/260
2	73/19.03
2	324/309
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2	324/76.27
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2	375/350
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2	455/182.2
2	455/182.3

Cross-Reference Classifications

61	331/25
25	327/105
25	455/260
21	331/17
21	375/376

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2 324/76.12
2 324/76.33
2 324/76.35
2 324/76.43
2 324/76.53
2 327/117
2 327/119
2 327/12
2 327/158
2 327/231
2 327/9
2 329/306
2 329/323
2 331/107SL
2 331/117D
2 331/12
2 331/158
2 331/175
2 331/22
2 331/3
2 331/37
2 331/38
2 331/41
2 331/47
2 331/56
2 331/74
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2 331/94.1
2 332/104
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2 332/125
2 332/145
2 341/118
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2 342/128
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2 342/173
2 342/200
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2 342/27
2 348/732
2 360/51
2 360/61
2 370/337
2 372/18
2 375/130
2 375/140
2 375/147
2 375/274
2 375/297
2 375/298
2 375/302
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2 375/324
2 375/346
2 375/350
2 375/367
2 375/372
2 377/44
2 377/47
2 455/126
2 455/164.2
2 455/182.1
2 455/192.3
2 455/208
2 455/226.1
2 455/264
2 455/265
2 455/3.02
2 455/304
2 455/310
2 455/42
2 455/67.13
2 455/75
2 455/77
2 455/84
2 702/69
2 702/75
2 708/272
2 725/68

Titles of Most Frequently Occurring Classifications of Patents Returned From A Search of 10761014 on February 10, 2005

65 331/25 (4 OR, 61 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/18 .With reference oscillator or source
331/25 ..Signal or phase comparator

34 331/16 (14 OR, 20 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/16 .Tuning compensation

34 455/76 (15 OR, 19 XR)
Class 455 : TELECOMMUNICATIONS
455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G., TRANSCEIVER)
455/75 .With frequency stabilization (e.g., automatic frequency control)
455/76 ..Synthesizer

31 327/105 (6 OR, 25 XR)
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING
327/105 .Synthesizer

28 455/260 (3 OR, 25 XR)
Class 455 : TELECOMMUNICATIONS
455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
455/230 .Local control of receiver operation
455/255 ..Local oscillator frequency control
455/257 ...Automatic
455/258 ....Utilizing particular local oscillator control
455/259 .....Reference oscillator or source
455/260 ......Phase lock loop or frequency synthesizer

26 331/1A (15 OR, 11 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/1A .AFC with logic elements

26 375/376 (5 OR, 21 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/354 SYNCHRONIZERS
375/371 .Phase displacement, slip or jitter correction
375/373 ..Phase locking
375/376 ...Phase locked loop

25 331/18 (7 OR, 18 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/18 .With reference oscillator or source

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25  708/276       (11 OR, 14 XR)
        Class   708 :  ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                         AND CALCULATING
        708/100       ELECTRICAL DIGITAL CALCULATING COMPUTER
        708/200       .Particular function performed
        708/270       ..Function generation
        708/276       ...Trigonometric

24  331/17        (3 OR, 21 XR)
        Class   331 :  OSCILLATORS
        331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                          OR FREQUENCY SENSING MEANS
        331/17        .Particular error voltage control (e.g.,
                         intergrating network)

22  327/106       (5 OR, 17 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/105       .Synthesizer
        327/106       ..Having stored waveform data (e.g., in ROM,
                         etc.)

20  327/107       (4 OR, 16 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/105       .Synthesizer
        327/107       ..Having digital device (e.g., logic gate,
                         flip-flop, etc.)

16  331/2         (10 OR, 6 XR)
        Class   331 :  OSCILLATORS
        331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                          OR FREQUENCY SENSING MEANS
        331/2         .Plural oscillators controlled

16  375/308       (7 OR, 9 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295       TRANSMITTERS
        375/302       .Angle modulation
        375/308       ..Phase shift keying

14  332/127       (1 OR, 13 XR)
        Class   332 :  MODULATORS
        332/117       FREQUENCY MODULATOR
        332/123       .Including stabilization or alternatively
                          distortion, noise or other interference prevention,
                          reduction, or compensation
        332/126       ..Automatic frequency stabilization or control

        332/127       ...Phase or frequency locked loop

14  708/271       (6 OR, 8 XR)
        Class   708 :  ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                         AND CALCULATING
        708/100       ELECTRICAL DIGITAL CALCULATING COMPUTER
        708/200       .Particular function performed
        708/270       ..Function generation
        708/271       ...Direct digital frequency synthesizer

13  331/4         (7 OR, 6 XR)
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Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/4 .Search sweep of oscillator

12 327/156 (2 OR, 10 XR)
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING
327/141 .Synchronizing
327/155 ..With feedback
327/156 ...Phase lock loop

12 332/103 (4 OR, 8 XR)
Class 332 : MODULATORS
332/103 PHASE SHIFT KEYING MODULATOR OR QUADRATURE AMPLITUDE MODULATOR

11 455/183.1 (1 OR, 10 XR)
Class 455 : TELECOMMUNICATIONS
455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
455/150.1 .Signal selection based on frequency (e.g., tuning)
455/179.1 ..Channel or station selection
455/183.1 ...With frequency synthesizer

10 332/144 (0 OR, 10 XR)
Class 332 : MODULATORS
332/144 PHASE MODULATOR

9 331/14 (2 OR, 7 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/14 .With intermittent comparison controls

9 331/23 (1 OR, 8 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/18 .With reference oscillator or source
331/23 ..Sensing modulation (e.g., frequency modulation controlled oscillator

9 332/128 (2 OR, 7 XR)
Class 332 : MODULATORS
332/117 FREQUENCY MODULATOR
332/123 .Including stabilization or alternatively distortion, noise or other interference prevention, reduction, or compensation
332/126 ..Automatic frequency stabilization or control

332/127 ...Phase or frequency locked loop
332/128 ....Modulating signal applied to plural elements of the loop

7 331/10 (2 OR, 5 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/10 .Plural A.F.S. for a single oscillator

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7  331/19        (0 OR, 7 XR)
       Class   331 :  OSCILLATORS
       331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                          OR FREQUENCY SENSING MEANS
       331/18        .With reference oscillator or source
       331/19        ..Spectrum reference source

7  375/344       (3 OR, 4 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/316       RECEIVERS
       375/344       .Automatic frequency control

7  455/113       (0 OR, 7 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/91        TRANSMITTER
       455/110       .Angle modulation
       455/113       ..With frequency control

6  324/76.27     (2 OR, 4 XR)
       Class   324 :  ELECTRICITY:  MEASURING AND TESTING
       324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                          SE
       324/76.12     .Analysis of complex waves
       324/76.19     ..Frequency spectrum analyzer
       324/76.26     ...Scanning-panoramic receiver
       324/76.27     ....With particular sweep circuit

6  327/159       (0 OR, 6 XR)
       Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                        DEVICES, CIRCUITS, AND SYSTEMS
       327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
       327/141       .Synchronizing
       327/155       ..With feedback
       327/156       ...Phase lock loop
       327/159       ....With digital element

6  331/178       (0 OR, 6 XR)
       Class   331 :  OSCILLATORS
       331/177R      WITH FREQUENCY ADJUSTING MEANS
       331/178       .Cyclic frequency sweeping means (e.g.,
                        vibrato)

6  331/1R        (4 OR, 2 XR)
       Class   331 :  OSCILLATORS
       331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                        OR FREQUENCY SENSING MEANS

6  331/34        (0 OR, 6 XR)
       Class   331 :  OSCILLATORS
       331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                          OR FREQUENCY SENSING MEANS
       331/34        .Particular frequency control means

6  375/303       (0 OR, 6 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/295       TRANSMITTERS
       375/302       .Angle modulation
       375/303       ..Frequency shift keying

6  375/327       (1 OR, 5 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/316       RECEIVERS
       375/322       .Angle modulation
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        375/324       ..Particular demodulator
        375/327       ...Phase locked loop

6  375/373       (3 OR, 3 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/354       SYNCHRONIZERS
        375/371       .Phase displacement, slip or jitter correction

        375/373       ..Phase locking

6  455/119       (1 OR, 5 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/91        TRANSMITTER
        455/119       .Carrier frequency stabilization

6  708/270       (1 OR, 5 XR)
        Class   708 :  ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                         AND CALCULATING
        708/100       ELECTRICAL DIGITAL CALCULATING COMPUTER
        708/200       .Particular function performed
        708/270       ..Function generation

5  324/76.23     (0 OR, 5 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                            SE
        324/76.12     .Analysis of complex waves
        324/76.19     ..Frequency spectrum analyzer
        324/76.23     ...With mixer

5  329/304       (1 OR, 4 XR)
        Class   329 :  DEMODULATORS
        329/304       PHASE SHIFT KEYING OR QUADRATURE AMPLITUDE
                         DEMODULATOR

5  331/179       (0 OR, 5 XR)
        Class   331 :  OSCILLATORS
        331/177R      WITH FREQUENCY ADJUSTING MEANS
        331/179       .Step-frequency change (e.g., band selection,
                         frequency-shift keying)

5  331/40        (1 OR, 4 XR)
        Class   331 :  OSCILLATORS
        331/37        BEAT FREQUENCY
        331/40        .Frequency or amplitude adjustment or control


5  331/DIG 2     (0 OR, 5 XR)
        Class   331 :  OSCILLATORS
        331/DIG 2     Phase locked loop having lock indicating or
                         detecting means

5  348/735       (1 OR, 4 XR)
        Class   348 :  TELEVISION
        348/725       RECEIVER CIRCUITRY
        348/735       .Automatic frequency control

5  375/329       (1 OR, 4 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS
        375/322       .Angle modulation
        375/329       ..Phase shift keying
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5  375/371       (0 OR, 5 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/354       SYNCHRONIZERS
        375/371       .Phase displacement, slip or jitter correction


5  455/110       (1 OR, 4 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/91        TRANSMITTER
        455/110       .Angle modulation

5  455/118       (0 OR, 5 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/91        TRANSMITTER
        455/118       .Frequency conversion

5  455/165.1     (0 OR, 5 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                        CONVERTER
        455/150.1     .Signal selection based on frequency (e.g.,
                        tuning)
        455/161.1     ..Frequency scanning
        455/165.1     ...With frequency synthesizer

5  455/183.2     (1 OR, 4 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                        CONVERTER
        455/150.1     .Signal selection based on frequency (e.g.,
                        tuning)
        455/179.1     ..Channel or station selection
        455/183.1     ...With frequency synthesizer
        455/183.2     ....Processor controlled

5  455/315       (1 OR, 4 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                        CONVERTER
        455/313       .Frequency modifying or conversion
        455/314       ..Plural separate successive conversions
        455/315       ...With plural separate local oscillators

4  327/157       (0 OR, 4 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                        DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/141       .Synchronizing
        327/155       ..With feedback
        327/156       ...Phase lock loop
        327/157       ....With charge pump

4  331/27        (0 OR, 4 XR)
        Class   331 :  OSCILLATORS
        331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                        OR FREQUENCY SENSING MEANS
        331/18        .With reference oscillator or source
        331/25        ..Signal or phase comparator
        331/27        ...Plural active element (e.g., triodes)

4  331/36C       (0 OR, 4 XR)
        Class   331 :  OSCILLATORS
        331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
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OR FREQUENCY SENSING MEANS
331/34 .Particular frequency control means
331/36R ..Reactance device (e.g., variable capacitors, saturable inductors, reactance tubes, etc.)
331/36C ...Capacitor controlled AFC

4 332/101 (2 OR, 2 XR)
Class 332 : MODULATORS
332/100 FREQUENCY SHIFT KEYING MODULATOR OR MINIMUM SHIFT KEYING MODULATOR
332/101 .Including logic element (e.g., logic gate or flip-flop)

4 332/117 (3 OR, 1 XR)
Class 332 : MODULATORS
332/117 FREQUENCY MODULATOR

4 332/119 (1 OR, 3 XR)
Class 332 : MODULATORS
332/117 FREQUENCY MODULATOR
332/119 .Plural modulation

4 348/731 (3 OR, 1 XR)
Class 348 : TELEVISION
348/725 RECEIVER CIRCUITRY
348/731 .Tuning

4 375/326 (3 OR, 1 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/316 RECEIVERS
375/322 .Angle modulation
375/324 ..Particular demodulator
375/326 ...Carrier recovery circuit or carrier tracking

4 375/345 (0 OR, 4 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/316 RECEIVERS
375/345 .Automatic gain control

4 375/375 (1 OR, 3 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/354 SYNCHRONIZERS
375/371 .Phase displacement, slip or jitter correction

375/373 ..Phase locking
375/375 ...With frequency detector and phase detector

4 377/48 (1 OR, 3 XR)
Class 377 : ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR SHIFT REGISTERS: CIRCUITS AND SYSTEMS
377/27 SYSTEMS
377/47 .Pulse multiplication or division
377/48 ..Multiplication or division by a fraction

4 455/112 (0 OR, 4 XR)
Class 455 : TELECOMMUNICATIONS
455/91 TRANSMITTER
455/110 .Angle modulation
455/112 ..With frequency multiplication or division

4 455/12.1 (1 OR, 3 XR)

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        Class   455 :  TELECOMMUNICATIONS
        455/7          CARRIER WAVE REPEATER OR RELAY SYSTEM (I.E.,
                            RETRANSMISSION OF SAME INFORMATION)
        455/11.1       .Portable or mobile repeater
        455/12.1       ..Space satellite

4  455/182.2     (2 OR, 2 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                             CONVERTER
        455/150.1      .Signal selection based on frequency (e.g.,
                            tuning)
        455/179.1      ..Channel or station selection
        455/182.1      ...With frequency control
        455/182.2      ....Automatic (AFC)

4  455/182.3     (2 OR, 2 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                             CONVERTER
        455/150.1      .Signal selection based on frequency (e.g.,
                            tuning)
        455/179.1      ..Channel or station selection
        455/182.3      ...Fine tuning

4  455/192.2     (0 OR, 4 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                             CONVERTER
        455/150.1      .Signal selection based on frequency (e.g.,
                            tuning)
        455/192.1      ..With frequency control
        455/192.2      ...Automatic (AFC)

4  455/209       (1 OR, 3 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                             CONVERTER
        455/205        .Frequency or phase modulation
        455/208        ..With synchronized or controlled local
                           oscillator
        455/209        ...Plural local oscillators or mixers

4  455/87        (0 OR, 4 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/73         TRANSMITTER AND RECEIVER AT SAME STATION (E.G.,
                             TRANSCEIVER)
        455/84         .With a common signal processing stage
        455/86         ..Transmitter oscillator used as local
                           oscillator
        455/87         ...Tunable or variable

3  324/76.19     (1 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11      MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                             SE
        324/76.12      .Analysis of complex waves
        324/76.19      ..Frequency spectrum analyzer

3  327/113       (0 OR, 3 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100        SIGNAL CONVERTING, SHAPING, OR GENERATING
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        327/113       .Frequency or repetition rate conversion or
                        control

3  327/115       (0 OR, 3 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/113       .Frequency or repetition rate conversion or
                          control
        327/114       ..Of output rectangular waveform
        327/115       ...Frequency division

3  327/129       (0 OR, 3 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/129       .Generating sinusoidal output

3  327/147       (0 OR, 3 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/141       .Synchronizing
        327/144       ..Using multiple clocks
        327/146       ...With feedback
        327/147       ....Phase lock loop

3  327/551       (0 OR, 3 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/524       SPECIFIC IDENTIFIABLE DEVICE, CIRCUIT, OR
                          SYSTEM
        327/551       .Unwanted signal suppression

3  327/7         (1 OR, 2 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
        327/1         SPECIFIC SIGNAL DISCRIMINATING (E.G.,
                            COMPARING, SELECTING, ETC.) WITHOUT SUBSEQUENT CONTROL

        327/2         .By phase
        327/3         ..Comparison between plural inputs (e.g., phase
                          angle indication, lead-lag discriminator, etc.)
        327/7         ...With reference signal

3  331/11        (2 OR, 1 XR)
        Class   331 :  OSCILLATORS
        331/1R        AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                           OR FREQUENCY SENSING MEANS
        331/10        .Plural A.F.S. for a single oscillator
        331/11        ..Plural comparators or discriminators

3  331/176       (1 OR, 2 XR)
        Class   331 :  OSCILLATORS
        331/175       FREQUENCY STABILIZATION
        331/176       .Temperature or current responsive means in
                        circuit

3  331/177R      (0 OR, 3 XR)
        Class   331 :  OSCILLATORS
        331/177R      WITH FREQUENCY ADJUSTING MEANS

3  331/177V      (0 OR, 3 XR)
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        Class   331 :  OSCILLATORS
        331/177R       WITH FREQUENCY ADJUSTING MEANS
        331/177V       .With voltage sensitive capacitor

3  331/30        (0 OR, 3 XR)
        Class   331 :  OSCILLATORS
        331/1R         AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                           OR FREQUENCY SENSING MEANS
        331/30         .With stable heterodyne oscillator or source

3  331/31        (0 OR, 3 XR)
        Class   331 :  OSCILLATORS
        331/1R         AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
                           OR FREQUENCY SENSING MEANS
        331/30         .With stable heterodyne oscillator or source
        331/31         ..Plural significant heterodyne stages

3  331/43        (0 OR, 3 XR)
        Class   331 :  OSCILLATORS
        331/37         BEAT FREQUENCY
        331/42         .With particular signal combining means (e.g.,
                           cavity mixer)
        331/43         ..With filter in mixer output circuit

3  331/66        (0 OR, 3 XR)
        Class   331 :  OSCILLATORS
        331/65         WITH DEVICE RESPONSIVE TO EXTERNAL PHYSICAL
                           CONDITION
        331/66         .Temperature or light responsive

3  331/96        (2 OR, 1 XR)
        Class   331 :  OSCILLATORS
        331/96         WITH DISTRIBUTED PARAMETER RESONATOR

3  332/100       (3 OR, 0 XR)
        Class   332 :  MODULATORS
        332/100        FREQUENCY SHIFT KEYING MODULATOR OR MINIMUM
                          SHIFT KEYING MODULATOR

3  332/123       (1 OR, 2 XR)
        Class   332 :  MODULATORS
        332/117        FREQUENCY MODULATOR
        332/123        .Including stabilization or alternatively
                          distortion, noise or other interference prevention,
                          reduction, or compensation

3  332/124       (1 OR, 2 XR)
        Class   332 :  MODULATORS
        332/117        FREQUENCY MODULATOR
        332/123        .Including stabilization or alternatively
                           distortion, noise or other interference prevention,
                           reduction, or compensation
        332/124        ..Nonlinearity reduction or compensation

3  342/118       (0 OR, 3 XR)
        Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                         AND DEVICES
        342/118        DETERMINING DISTANCE

3  342/175       (0 OR, 3 XR)
        Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                         AND DEVICES
        342/175        WITH PARTICULAR CIRCUIT
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3  342/195       (0 OR, 3 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/175       WITH PARTICULAR CIRCUIT
       342/195       .Digital processing

3  342/202       (2 OR, 1 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/175       WITH PARTICULAR CIRCUIT
       342/202       .For pulse modulation

3  342/22        (3 OR, 0 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/22        TRANSMISSION THROUGH MEDIA OTHER THAN AIR OR
                        FREE SPACE

3  370/516       (1 OR, 2 XR)
       Class   370 :  MULTIPLEX COMMUNICATIONS
       370/473       ..Transmission of a single message having
                           multiple packets
       370/498       .Combining or distributing information via time
                          channels
       370/503       ..Synchronizing
       370/516       ...Adjusting for phase or jitter

3  375/146       (1 OR, 2 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/130       SPREAD SPECTRUM
       375/140       .Direct sequence
       375/146       ..Transmitter

3  375/216       (0 OR, 3 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/216       APPARATUS CONVERTIBLE TO ANALOG

3  375/222       (2 OR, 1 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/219       TRANSCEIVERS
       375/222       .Modems (data sets)

3  375/271       (0 OR, 3 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/259       SYSTEMS USING ALTERNATING OR PULSATING CURRENT

       375/271       .Angle modulation

3  375/272       (0 OR, 3 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/259       SYSTEMS USING ALTERNATING OR PULSATING CURRENT

       375/271       .Angle modulation
       375/272       ..Frequency shift keying

3  375/279       (0 OR, 3 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/259       SYSTEMS USING ALTERNATING OR PULSATING CURRENT

       375/271       .Angle modulation
       375/279       ..Phase shift keying
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3  375/296       (2 OR, 1 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/295       TRANSMITTERS
       375/296       .Antinoise or distortion (includes
                        predistortion)

3  375/377       (2 OR, 1 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/377       MISCELLANEOUS

3  455/316       (0 OR, 3 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
       455/313       .Frequency modifying or conversion
       455/314       ..Plural separate successive conversions
       455/315       ...With plural separate local oscillators
       455/316       ....With frequency stabilization for at least
                        one local oscillator

3  455/324       (0 OR, 3 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
       455/313       .Frequency modifying or conversion
       455/323       ..Particular frequency conversion structure or
                        circuitry
       455/324       ...Homodyne (i.e., zero beat or synchrodyne
                        reception)

3  455/67.16     (0 OR, 3 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/39        TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

       455/67.11     .Having measuring, testing, or monitoring of
                        system or part
       455/67.16     ..Phase measuring (e.g., group delay,
                        propagation effect, etc.)

3  455/71        (0 OR, 3 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/39        TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

       455/68        .With control signal
       455/70        ..Receiver control signal originates at message
                        transmitter
       455/71        ...Frequency control

3  455/86        (1 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/73        TRANSMITTER AND RECEIVER AT SAME STATION (E.G.,
                           TRANSCEIVER)
       455/84        .With a common signal processing stage
       455/86        ..Transmitter oscillator used as local
                        oscillator

3  708/313       (1 OR, 2 XR)
       Class   708 :  ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                        AND CALCULATING
       708/100       ELECTRICAL DIGITAL CALCULATING COMPUTER
       708/200       .Particular function performed
       708/300       ..Filtering
       708/313       ...Decimation/interpolation
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2   73/19.03      (2 OR, 0 XR)
        Class    073 :  MEASURING AND TESTING
        73/19.01       GAS CONTENT OF A LIQUID OR A SOLID
        73/19.03       .By vibration

2   73/632        (0 OR, 2 XR)
        Class    073 :  MEASURING AND TESTING
        73/570         VIBRATION
        73/584         .By mechanical waves
        73/596         ..Beamed
        73/632         ...Sonic wave transmitter or receiver
                          transducer

2   73/866.5      (0 OR, 2 XR)
        Class    073 :  MEASURING AND TESTING
        73/866.5       PROBE OR PROBE MOUNTING

2  324/307        (0 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/300        PARTICLE PRECESSION RESONANCE
        324/307        .Using a nuclear resonance spectrometer system


2  324/309        (2 OR, 0 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/300        PARTICLE PRECESSION RESONANCE
        324/307        .Using a nuclear resonance spectrometer system

        324/309        ..To obtain localized resonance within a sample


2  324/314        (0 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/300        PARTICLE PRECESSION RESONANCE
        324/307        .Using a nuclear resonance spectrometer system

        324/314        ..With conditioning of transmitter signal

2  324/326        (0 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323        OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/326        .For small object detection or location

2  324/332        (0 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323        OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/332        .With radiant energy or nonconductive-type
                          transmitter

2  324/344        (0 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323        OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/344        .With radiant energy or nonconductive-type
                          receiver

2  324/613        (2 OR, 0 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600        IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                            REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                            RELATIONSHIPS
        324/612        .Parameter related to the reproduction or
                           fidelity of a signal affected by a circuit under test
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        324/613       ..Noise

2  324/76.12     (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                        SE
        324/76.12     .Analysis of complex waves

2  324/76.33     (2 OR, 0 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                        SE
        324/76.12     .Analysis of complex waves
        324/76.19     ..Frequency spectrum analyzer
        324/77.11     ...Nonscanning
        324/76.33     ....Correlation

2  324/76.35     (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                        SE
        324/76.12     .Analysis of complex waves
        324/76.19     ..Frequency spectrum analyzer
        324/77.11     ...Nonscanning
        324/76.35     ....With delay line

2  324/76.43     (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                        SE
        324/76.39     .Frequency of cyclic current or voltage (e.g.,
                        cyclic counting etc.)
        324/76.41     ..Frequency comparison, (e.g., heterodyne,
                        etc.)
        324/76.43     ...With plural mixers

2  324/76.53     (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/76.11     MEASURING, TESTING, OR SENSING ELECTRICITY, PER
                        SE
        324/76.39     .Frequency of cyclic current or voltage (e.g.,
                        cyclic counting etc.)
        324/76.52     ..By phase comparison
        324/76.53     ...With phase lock

2  327/117       (0 OR, 2 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                        DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/113       .Frequency or repetition rate conversion or
                        control
        327/117       ..Frequency division

2  327/119       (0 OR, 2 XR)
        Class   327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                        DEVICES, CIRCUITS, AND SYSTEMS
        327/100       SIGNAL CONVERTING, SHAPING, OR GENERATING
        327/113       .Frequency or repetition rate conversion or
                        control
        327/119       ..Frequency multiplication (e.g., harmonic
                        generation, etc.)

2  327/12        (1 OR, 1 XR)
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Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/1 SPECIFIC SIGNAL DISCRIMINATING (E.G., COMPARING, SELECTING, ETC.) WITHOUT SUBSEQUENT CONTROL
327/2 .By phase
327/3 ..Comparison between plural inputs (e.g., phase angle indication, lead-lag discriminator, etc.)
327/12 ...With logic or bistable circuit

2 327/158 (1 OR, 1 XR)
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING
327/141 .Synchronizing
327/155 ..With feedback
327/156 ...Phase lock loop
327/158 ....With variable delay means

2 327/231 (0 OR, 2 XR)
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING
327/231 .Phase shift by less than period of input

2 327/9 (0 OR, 2 XR)
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR DEVICES, CIRCUITS, AND SYSTEMS
327/1 SPECIFIC SIGNAL DISCRIMINATING (E.G., COMPARING, SELECTING, ETC.) WITHOUT SUBSEQUENT CONTROL
327/2 .By phase
327/3 ..Comparison between plural inputs (e.g., phase angle indication, lead-lag discriminator, etc.)
327/7 ...With reference signal
327/9 ....With sampling

2 329/306 (0 OR, 2 XR)
Class 329 : DEMODULATORS
329/304 PHASE SHIFT KEYING OR QUADRATURE AMPLITUDE DEMODULATOR
329/306 .Input signal combined with local oscillator or carrier frequency signal

2 329/323 (0 OR, 2 XR)
Class 329 : DEMODULATORS
329/315 FREQUENCY MODULATION DEMODULATOR
329/323 .Input signal combined with local oscillator or carrier frequency signal

2 331/107SL (1 OR, 1 XR)
Class 331 : OSCILLATORS
331/107R SOLID STATE ACTIVE ELEMENT OSCILLATOR
331/107DP .Significant distributed parameter resonator (e.g., cavity)
331/107SL ..Stripline type

2 331/117D (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/107R SOLID STATE ACTIVE ELEMENT OSCILLATOR
331/108R .Transistors
331/117R ..L-C type
331/117D ...Distributed parameter resonator transistor

2 331/12 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/10 .Plural A.F.S. for a single oscillator
331/11 ..Plural comparators or discriminators
331/12 ...With phase-shifted inputs

2 331/158 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/154 ELECTROMECHANICAL RESONATOR
331/158 .Crystal

2 331/175 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/175 FREQUENCY STABILIZATION

2 331/22 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/18 .With reference oscillator or source
331/22 ..Plural significant heterodyne stages

2 331/3 (2 OR, 0 XR)
Class 331 : OSCILLATORS
331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS
331/3 .Molecular resonance stabilization

2 331/37 (1 OR, 1 XR)
Class 331 : OSCILLATORS
331/37 BEAT FREQUENCY

2 331/38 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/37 BEAT FREQUENCY
331/38 .Plural beating

2 331/41 (1 OR, 1 XR)
Class 331 : OSCILLATORS
331/37 BEAT FREQUENCY
331/41 .Frequency stabilization

2 331/47 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/46 PLURAL OSCILLATORS
331/47 .Oscillator used to vary amplitude or frequency of another oscillator

2 331/56 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/46 PLURAL OSCILLATORS
331/56 .Parallel connected

2 331/74 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/74 COMBINED WITH PARTICULAR OUTPUT COUPLING NETWORK

2 331/77 (0 OR, 2 XR)

Class 331 : OSCILLATORS
331/74 COMBINED WITH PARTICULAR OUTPUT COUPLING NETWORK
331/77 .Wave filter

2 331/78 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/78 ELECTRICAL NOISE OR RANDOM WAVE GENERATOR

2 331/94.1 (0 OR, 2 XR)
Class 331 : OSCILLATORS
331/94.1 MOLECULAR OR PARTICLE RESONANT TYPE (E.G., MASER)

2 332/104 (0 OR, 2 XR)
Class 332 : MODULATORS
332/103 PHASE SHIFT KEYING MODULATOR OR QUADRATURE AMPLITUDE MODULATOR
332/104 .Including logic element (e.g., logic gate or flip-flop)

2 332/112 (2 OR, 0 XR)
Class 332 : MODULATORS
332/106 PULSE OR INTERRUPTED CONTINUOUS WAVE MODULATOR

332/112 .Pulse position, frequency, phase, or spacing modulator

2 332/125 (1 OR, 1 XR)
Class 332 : MODULATORS
332/117 FREQUENCY MODULATOR
332/123 .Including stabilization or alternatively distortion, noise or other interference prevention, reduction, or compensation
332/125 ..Automatic amplitude stabilization or control

2 332/145 (0 OR, 2 XR)
Class 332 : MODULATORS
332/144 PHASE MODULATOR
332/145 .Including amplitude modulator

2 341/118 (1 OR, 1 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/118 CONVERTER COMPENSATION

2 341/147 (1 OR, 1 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/126 ANALOG TO OR FROM DIGITAL CONVERSION
341/144 .Digital to analog conversion
341/147 ..Function generator

2 342/128 (1 OR, 1 XR)
Class 342 : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
342/118 DETERMINING DISTANCE
342/128 .With frequency modulation

2 342/134 (0 OR, 2 XR)
Class 342 : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
342/118 DETERMINING DISTANCE
342/134 .With pulse modulation

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2  342/135       (0 OR, 2 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/118       DETERMINING DISTANCE
       342/134       .With pulse modulation
       342/135       ..Digital (e.g., with counter)

2  342/173       (0 OR, 2 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/165       TESTING OR CALIBRATING OF RADAR SYSTEM
       342/173       .By monitoring

2  342/200       (2 OR, 0 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/175       WITH PARTICULAR CIRCUIT
       342/200       .For frequency modulation

2  342/204       (0 OR, 2 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/175       WITH PARTICULAR CIRCUIT
       342/202       .For pulse modulation
       342/204       ..With pulse shaping

2  342/27        (0 OR, 2 XR)
       Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                        AND DEVICES
       342/27        PRESENCE DETECTION ONLY

2  348/732       (1 OR, 1 XR)
       Class   348 :  TELEVISION
       348/725       RECEIVER CIRCUITRY
       348/731       .Tuning
       348/732       ..Search tuning

2  360/51        (2 OR, 0 XR)
       Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                        RETRIEVAL
       360/39        GENERAL PROCESSING OF A DIGITAL SIGNAL
       360/51        .Data clocking

2  360/61        (0 OR, 2 XR)
       Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                        RETRIEVAL
       360/55        GENERAL RECORDING OR REPRODUCING
       360/61        .Signal switching

2  370/337       (2 OR, 0 XR)
       Class   370 :  MULTIPLEX COMMUNICATIONS
       370/310       COMMUNICATION OVER FREE SPACE
       370/328       .Having a plurality of contiguous regions
                           served by respective fixed stations
       370/329       ..Channel assignment
       370/336       ...Combining or distributing information via
                          time channels
       370/337       ....Multiple access (e.g., TDMA)

2  372/18        (1 OR, 1 XR)
       Class   372 :  COHERENT LIGHT GENERATORS
       372/9         PARTICULAR BEAM CONTROL DEVICE
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        372/18          .Mode locking

2  375/130       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/130        SPREAD SPECTRUM

2  375/140       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/130        SPREAD SPECTRUM
        375/140        .Direct sequence

2  375/147       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/130        SPREAD SPECTRUM
        375/140        .Direct sequence
        375/147        ..Receiver

2  375/274       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/259        SYSTEMS USING ALTERNATING OR PULSATING CURRENT

        375/271        .Angle modulation
        375/272        ..Frequency shift keying
        375/274        ...Minimum shift keying

2  375/297       (2 OR, 0 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/296        .Antinoise or distortion (includes
                           predistortion)
        375/297        ..Power amplifier

2  375/298       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/298        .Quadrature amplitude modulation

2  375/302       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/302        .Angle modulation

2  375/305       (1 OR, 1 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/302        .Angle modulation
        375/303        ..Frequency shift keying
        375/305        ...Minimum shift keying

2  375/306       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/302        .Angle modulation
        375/303        ..Frequency shift keying
        375/306        ...One oscillator

2  375/307       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/295        TRANSMITTERS
        375/302        .Angle modulation
        375/303        ..Frequency shift keying
        375/307        ...Two or more oscillators
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2  375/316       (2 OR, 0 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS

2  375/317       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS
        375/317       .Automatic baseline or threshold adjustment

2  375/324       (0 OR, 2 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS
        375/322       .Angle modulation
        375/324       ..Particular demodulator

2  375/346       (1 OR, 1 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS
        375/346       .Interference or noise reduction

2  375/350       (2 OR, 0 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/316       RECEIVERS
        375/346       .Interference or noise reduction
        375/350       ..By filtering (e.g., digital)

2  375/367       (1 OR, 1 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/354       SYNCHRONIZERS
        375/362       .Frequency or phase control using synchronizing
                          signal
        375/365       ..Synchronization word
        375/367       ...Pseudo noise

2  375/372       (1 OR, 1 XR)
        Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
        375/354       SYNCHRONIZERS
        375/371       .Phase displacement, slip or jitter correction

        375/372       ..Elastic buffer

2  377/44        (0 OR, 2 XR)
        Class   377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                         SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
        377/27        SYSTEMS
        377/44        .Counter controlled counter

2  377/47        (1 OR, 1 XR)
        Class   377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                         SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
        377/27        SYSTEMS
        377/47        .Pulse multiplication or division

2  455/126       (0 OR, 2 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/91        TRANSMITTER
        455/126       .With feedback of modulated output signal

2  455/164.2     (1 OR, 1 XR)
        Class   455 :  TELECOMMUNICATIONS
        455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                          CONVERTER
        455/150.1     .Signal selection based on frequency (e.g.,
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                          tuning)
        455/161.1      ..Frequency scanning
        455/164.1      ...With automatic frequency control
        455/164.2      ....Processor controlled (AFC)

2  455/182.1     (0 OR, 2 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/150.1      .Signal selection based on frequency (e.g.,
                           tuning)
        455/179.1      ..Channel or station selection
        455/182.1      ...With frequency control

2  455/192.3     (0 OR, 2 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/150.1      .Signal selection based on frequency (e.g.,
                           tuning)
        455/192.1      ..With frequency control
        455/192.3      ...Fine tuning

2  455/208       (0 OR, 2 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/205        .Frequency or phase modulation
        455/208        ..With synchronized or controlled local
                           oscillator

2  455/226.1     (1 OR, 1 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/226.1      .Measuring or testing of receiver

2  455/264       (0 OR, 2 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/230        .Local control of receiver operation
        455/255        ..Local oscillator frequency control
        455/257        ...Automatic
        455/258        ....Utilizing particular local oscillator
                           control
        455/264        .....Voltage control of oscillator

2  455/265       (1 OR, 1 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/130        RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
        455/230        .Local control of receiver operation
        455/255        ..Local oscillator frequency control
        455/257        ...Automatic
        455/265        ....With local oscillator synchronization or
                           locking

2  455/3.02      (1 OR, 1 XR)
        Class    455 :  TELECOMMUNICATIONS
        455/3.01       WIRELESS DISTRIBUTION SYSTEM
        455/3.02       .Receiver for satellite broadcast
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2  455/304       (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                       CONVERTER
       455/296       .Noise or interference elimination
       455/303       ..Using plural separate signal paths
       455/304       ...Phase shift in at least one path

2  455/310       (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/130       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                       CONVERTER
       455/296       .Noise or interference elimination
       455/310       ..Internally generated noise or oscillations

2  455/42        (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/39        TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

       455/42        .Frequency or phase modulation

2  455/67.13     (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/39        TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

       455/67.11     .Having measuring, testing, or monitoring of
                       system or part
       455/67.13     ..Noise, distortion, or unwanted signal
                       detection (e.g., quality control, etc.)

2  455/75        (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/73        TRANSMITTER AND RECEIVER AT SAME STATION (E.G.,
                       TRANSCEIVER)
       455/75        .With frequency stabilization (e.g., automatic
                       frequency control)

2  455/77        (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/73        TRANSMITTER AND RECEIVER AT SAME STATION (E.G.,
                       TRANSCEIVER)
       455/77        .With tuning

2  455/84        (0 OR, 2 XR)
       Class   455 :  TELECOMMUNICATIONS
       455/73        TRANSMITTER AND RECEIVER AT SAME STATION (E.G.,
                       TRANSCEIVER)
       455/84        .With a common signal processing stage

2  702/69        (1 OR, 1 XR)
       Class   702 :  DATA PROCESSING: MEASURING, CALIBRATING, OR
                       TESTING
       702/1         MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT
       702/57        .Electrical signal parameter measurement system

       702/66        ..Waveform analysis
       702/69        ...Signal quality (e.g., timing jitter,
                       distortion, signal-to-noise ratio)

2  702/75        (1 OR, 1 XR)
       Class   702 :  DATA PROCESSING: MEASURING, CALIBRATING, OR
                       TESTING
       702/1         MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT
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        702/57          .Electrical signal parameter measurement system

        702/66          ..Waveform analysis
        702/75          ...Frequency

2  708/272        (0 OR, 2 XR)
        Class    708 :  ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                          AND CALCULATING
        708/100         ELECTRICAL DIGITAL CALCULATING COMPUTER
        708/200         .Particular function performed
        708/270         ..Function generation
        708/272         ...Memory used to store waveshape

2  725/68         (0 OR, 2 XR)
        Class    725 :  INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
        725/63          SATELLITE VIDEO DISTRIBUTION SYSTEM
        725/68          .Receiver
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ability 1
above 5
abstract 1
accompanying 1
accomplished 1
accordance 2
according 2
achieved 2
acquisition 1
across 1
adaptable 1
added 1
additional 1
adjust 1
adjustable 1
adjusted 1
adjusting 2
advance 1
advantages 2
after 7
against 1
aircraft 1
allows 2
also 8
alternative 1
ambiguity 1
among 2
amplitude 1
an 28
analog 6
and 112
another 6
antenna 2
any 3
aperture 4
apparatus 1
apparent 1
appears 1
appended 1
application 1
applications 2
appreciated 2
approach 5
approaches 2
appropriate 1
arbitrary 1
architecture 1
arcsine 1
are 14
arrangement 3
art 3
artisan 2
as 25
asic 1
assignee 1
associated 7
at 22
attorney 2
auxiliary 1
available 1
averaging 1
azimuth 1
background 2

band 2
bandwidth 1
base 4
based 4
be 39
because 3
become 1
been 1
before 9
beginning 2
begins 1
being 1
below 2
benefit 2
between 18
block 5
blocks 1
board 1
both 1
break 2
brief 1
brown 1
but 3
by 35
calculate 1
calculated 1
calibrated 2
calibrating 5
calibration 16
calibrator 4
can 1
capable 1
carrier 3
cascaded 2
caused 1
certainly 1
challenge 1
change 2
changing 1
chip 1
chirp 21
chirps 1
choice 1
circuit 1
circuits 3
claims 1
clock 2
coarse 10
coast 1
coasting 11
coherency 1
combination 1
combinations 1
combine 2
combined 2
combines 2
combining 1
come 1
communication 3
compared 1
comparing 2
complete 1
components 6

compounded 1
comprises 1
comprising 1
concurrently 1
conditions 2
configuration 1
connected 6
connecting 1
consequently 1
constant 1
construed 1
content 1
continues 1
continuity 6
continuous 25
control 5
controllably 2
controlled 4
controller 14
controlling 1
controls 1
convenient 1
conventional 3
converter 13
converters 5
convey 1
copending 1
correlated 1
correlation 3
corresponding 1
could 1
coupled 8
coupling 1
course 1
cover 1
created 8
creates 1
creating 2
cross 4
currently 1
data 2
dds 32
decoded 1
define 1
defined 1
degradation 2
degrees 3
described 9
describing 1
description 3
descriptions 1
desired 2
detail 3
detailed 2
details 2
detector 2
determine 3
determines 1
determining 1
deviation 1
diagram 10
diagrammatically 1
difference 5

different 16
digital 16
digitally 1
dimension 3
direct 3
directed 2
disclosed 2
disclosure 3
disclosures 1
discontinuities 15
discontinuity 1
discussed 2
distorts 1
disturbance 1
disturbances 2
divider 4
division 1
do 1
docket 2
does 1
downstream 3
drawings 4
drift 1
due 2
duration 1
during 23
each 4
efficient 1
either 2
elements 3
eliminated 1
embodied 1
embodiment 5
embodiments 8
end 1
enlarged 2
entire 2
entirety 1
entitled 1
equal 8
equals 1
equipment 1
error 5
errors 1
established 1
even 1
exact 1
example 9
except 1
exhibit 1
external 1
facilitates 1
factor 1
factors 1
fast 1
features 3
feedback 4
field 2
fig 10
figs 2
figure 1
filed 1
filter 3

fine 9
finest 2
first 16
fixed 2
fm 1
fo 1
foff 14
following 1
for 18
foregoing 2
forms 1
forth 1
four 1
frequencies 5
frequency 140
from 19
fully 3
function 1
functional 1
fx 6
gain 2
gcsd 17
generate 4
generated 4
generates 2
generating 8
generator 17
generators 1
ghz 1
good 1
granularity 2
greater 1
ground 1
grouping 1
hand 1
hardware 1
has 4
have 3
having 4
here 1
herein 3
hereinafter 1
herewith 1
high 8
higher 3
highest 1
holds 1
however 4
ibrating 1
ideal 2
ieee 1
if 1
ifs 1
illustrate 1
illustrated 4
illustrating 1
illustration 1
image 2
imagery 1
implementation 1
implemented 1
improves 1
in 39

include 4
included 2
includes 9
including 6
incorporated 1
increase 3
increased 1
indicate 1
induced 1
infinite 1
initial 1
initially 2
input 4
inputs 7
instances 1
instant 3
instantaneous 2
integrated 1
integrators 4
intended 3
interval 6
introduction 1
invention 25
involves 1
is 79
isolation 1
its 6
kand 1
key 1
known 1
kushner 1
large 1
like 3
limit 2
limited 2
limiting 1
linear 1
linearization 1
linearly 2
little 1
lmmary 1
local 1
located 1
locked 6
lookup 1
loop 10
loss 1
low 5
lowest 2
made 4
maintain 1
major 1
make 2
manner 1
many 2
match 1
mathematical 1
maximize 1
may 20
means 1
meant 2
measured 4
measurements 3

method 5
methods 3
mhz 8
mind 1
minimize 1
mirror 1
mirrored 2
mission 2
mixer 14
mixing 1
modifications 2
modular 2
modulated 2
modulation 2
more 4
motion 1
multiple 1
multiplication 2
multiplications 1
multiplier 1
multiply 1
multiplying 1
narrow 1
near 1
need 1
needed 3
negative 2
new 3
next 3
no 4
noise 2
non 2
normally 3
not 10
notation 1
noted 1
now 3
nphase 1
numbers 1
object 1
objects 2
obscure 1
occur 1
of 133
offer 1
offset 43
on 7
one 4
only 1
open 1
opens 1
operation 4
operations 1
operative 4
optimal 1
or 12
order 3
oscillator 3
oscillators 1
oseillator 1
other 6
out 3
output 35

over 5
overall 1
overview 1
packaged 1
page 17
pages 1
particular 2
particularly 1
pass 3
patent 1
performance 2
pertinent 1
phase 103
platform 2
pll 10
plo 7
plurality 7
plus 1
point 3
pointed 1
points 1
porcello 1
portion 2
possible 1
post 3
power 5
practical 1
pre 6
precise 1
preferably 4
preferred 2
prescribed 1
present 19
presented 1
pretune 1
previous 3
primarily 2
prime 1
principles 1
problem 1
proceeds 1
processing 3
processor 1
produce 12
produced 10
produces 2
product 1
provide 5
provided 9
provides 5
providing 3
pulse 2
pure 1
purity 1
purpose 1
purposes 1
put 1
quadratic 1
radar 5
radiation 2
radio 1
ralibrating 1
ramp 8

ramps 1
range 22
rat 1
rates 1
rather 2
reaching 2
readily 4
realize 1
receive 2
receiver 1
receiving 9
reduce 11
reduced 2
refer 1
reference 17
referenced 1
referring 5
refertnce 1
reflected 1
reflection 1
region 1
relates 1
relative 1
relatively 18
removed 1
require 1
required 2
requiremenfs 1
reset 1
resides 1
resolution 4
resolve 1
resolves 1
respective 4
respectively 1
response 1
restarted 1
result 1
return 3
returned 1
returns 1
rf 3
rmhodiments 1
rrrquency 1
same 2
sar 8
satellite 1
schematic 3
schematically 1
scope 2
second 18
selects 1
self 7
september 1
sequentially 1
serrodyne 1
set 6
sets 2
settings 1
settling 1
short 1
should 4
show 1

shown 2
shows 1
side 1
signal 66
signals 16
similar 1
simplified 1
since 2
skilled 5
smoothed 1
so 9
source 1
specific 3
spectral 2
spectrum 1
speed 2
spurious 1
sqt 1
stairstep 1
standard 1
static 1
step 1
stepped 1
steps 1
successive 1
successively 17
such 8
suffer 1
sum 5
supplied 4
sweep 9
sweeping 1
swept 29
switch 24
switched 13
switches 7
switching 47
synchronize 1
synthesis 1
synthesizer 40
synthesizing 1
synthetic 3
system 3
systems 4
table 1
taken 1
teachings 1
technique 1
techniques 1
technologies 1
temperature 1
term 1
than 3
that 19
the 363
their 4
then 2
there 1
therefor 1
therefore 3
thereupon 1
these 2
they 1

third 2
this 9
thorough 1
those 5
through 3
throughout 1
thus 3
time 11
timing 4
tl 2
to 123
tolerant 1
track 1
transient 3
transients 4
transition 2
transitions 1
translation 3
transmit 2
transmitter 1
tune 8
tuned 1
tuning 5
typical 1
typically 5
under 5
understandable 1
understood 3
undesired 14
unfortunately 1
unit 6
up 3
uphase 1
upon 5
upper 1
use 2
used 7
using 2
utilized 1
value 1
various 3
varying 1
vco 1
via 2
view 1
views 1
voltage 2
waveform 1
waveforms 2
well 2
were 1
when 2
whenever 1
where 1
which 19
while 4
wide 1
wideband 15
widen 1
widerahd 2
width 1
wifh 1
will 13

with 22
within 4
without 2
words 2
would 8
yet 1
zero 5